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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,016	02/01/2000	Mrudula Kanuri	95-308	5591

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EXAMINER

HA, YVONNE QUY M

ART UNIT	PAPER NUMBER
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2697

DATE MAILED: 03/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/496,016

Applicant(s)

KANURI, MRUDULA

Examiner

Yvonne Q. Ha

Art Unit

2697

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kadambi et al. (US Patent 6,430,188).

Referring to claims 1 and 9, Kadambi discloses a method in an integrated network switch having a plurality of network ports and a switching module, the switching module configured for learning network addresses of received data packets (col. 3, lines 2-8, structure of a network switch with a plurality of ports able to receive data via the ingress logic circuit and address resolution and filtering), the method comprising: identifying one of the network switch ports that transfer data packets between the integrated network switch and a router (col. 3, lines 26-40, the address resolution search and filtering request in the port receiving data packet. The result is added into a unified table); and disabling learning by the switching module of network addresses for the data packets transferred by the identified one network switch port (col. 12, lines 4-7, the unified table is updated with indication to disable re-learning identified destination port).

Referring to claim 2, Kadambi discloses all aspects of the claimed invention and further teaches learning layer 2 and layer 3 address information by the switching module for data packets transferred by at least two of the network switch ports between respective connected

subnetworks (col. 5, lines 44-49, 66; col. 6, lines 1-2, the structure of EPIC which consists of a plurality of ports with learning of L2 and L3 address information).

Referring to claim 3, Kadambi discloses all aspects of the claimed invention and further teaches the learning step comprises: receiving a first data packet from a second of the network switch ports configured for transferring data packets between the network switch and a first of the connected subnetworks (col. 5, line 66; col. 6, lines 1-29, the structure of EPIC which consists of a plurality of ingress and egress ports); and storing in an address table a table entry including a source MAC address and a source IP address from the first data packet, and an identifier of the second network switch port (col. 35, lines 63-66, Fig. 22 and Fig. 23, the unified table used to store information for address search/resolution).

Referring to claims 4 and 11, Kadambi discloses all aspects of the claimed invention and further teaches the disabling step includes permanently setting the one network switch port into a non learning mode by a host controller (col. 17, lines 37-47, the ability of the network switch to set port into various state including learning/non-learning modes).

Referring to claim 5, Kadambi discloses all aspects of the claimed invention and further teaches the learning step comprises storing in the table entry a virtual local area network (VLAN) identifier and a vector that identifies at least one of the network switch ports to output the corresponding first data packet (col. 35, lines 63-66, Fig. 22 and Fig. 23, the unified table used to store information for address search/resolution).

Referring to claim 6, Kadambi discloses all aspects of the claimed invention and further teaches receiving new data packet on any one of the network switch ports; determining if the new data packet has a layer 3 destination address stored by the switching module; and

forwarding the new data packet to the one network switch port for transfer to the router, based on a determined absence of the layer 3 destination addresses stored by the switching module (Fig. 26 and Fig. 27, col. 37, lines 42-67 to col. 38, lines 1-15, receiving data packet and checking for L3 filtering. Based on filtering result including if L3 destination entry is not found, packet switching resumes).

Referring to claims 7 and 8, Kadambi discloses all aspects of the claimed invention and further teaches the disabling step includes: receiving a data packet by a second of the network switch ports connected to a subnetwork, the data packet having a source media access control (MAC) address, a destination MAC address, a source Internet Protocol (IP) address, and a destination IP address (col. 35, lines 63-66, Fig. 22 and Fig. 23, unified table can be used to indicate learning of source/destination MAC addresses and source/destination IP addresses); learning the source MAC address and a destination MAC address of the received data packet by the switching module (col. 35, lines 63-66, Fig. 22 and Fig. 23, unified table can be used to indicate learning of source/destination MAC addresses and source/destination IP addresses); determining that the one switch port has a learning bit disabled (col. 17, lines 37-47, the ability of the network switch to set port into various state including learning/non-learning modes); and disabling learning of the destination IP address of the received data packet based on the determination that the corresponding one switch port has the corresponding learning bit disabled (col. 17, lines 58-65, Fig. 23, RTAG field in the table identifies unique table entries for source/destination MAC addresses and source/destination IP address).

Referring to claim 10, Kadambi discloses all aspects of the claimed invention and further teaches the switching module includes an address table configured for storing, for each network

node connected to the network switch, a media access control (MAC) address, an Internet Protocol (IP) address, a virtual local area network (VLAN) identifier, and an identifier for one of the network switch ports connected to the corresponding network node (col. 5, line 66; col. 6, lines 1-29, the structure of EPIC which consists of a plurality of ingress and egress ports; col. 35, lines 63-66, Fig. 22 and Fig. 23, the unified table used to store information for address search/resolution).

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Viswanadham et al. (US Patent 6,424,659) discloses multi-layer switching apparatus and method
- Szczepanek (US Patent 6,414,956) discloses VLAN tag transport within a switch
- Allen, Jr et al. (US Patent 6,404,752) discloses network switch using network processor and methods
- Ganesh et al. (US Patent 6,347,087) discloses content-based forwarding/filtering in a network switching device

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 703-305-4798. The fax phone numbers for the

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organization where this application or proceeding is assigned are 703-305-3988 for regular communications and 703-305-9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

YQH

March 18, 2003



**RICKY NGO**  
**PRIMARY EXAMINER**